DOCUMENT RESUME

ED 027 993 RC 003 289

By- Anderson, David Neil
Daily Modular Scheduling Practice at Pahranagat Valley High School. Report.
Nevada Western States Small Schools Project. Carson City.
Spons Agency- Ford Foundation, New York, N.Y.
Pub Date [66]
Note- 91p.
EDRS Price MF-$0.50 HC-$4.65
Descriptors- *Curriculum Design, Curriculum Development, *Flexible Scheduling, Individualized Curriculum, Learning Activities, Program Evaluation, *Schedule Modules, Scheduling, School Schedules, Secondary Schools, *Small Schools, *Time Factors (Learning)

The main topic discussed is a daily modular scheduling system initiated for the small enrollment at Pahranagat Valley High School in Alamo, Nevada, with specific reference to types of instruction, schedule procedures, and conflict problems. An evaluation of the scheduling system is also included. The report is written in dissertation format, which presents a statement of the problem and a definition of terms, a review of literature relevant to modular scheduling, and a discussion of the development of a hand-generated modular schedule. (EV)

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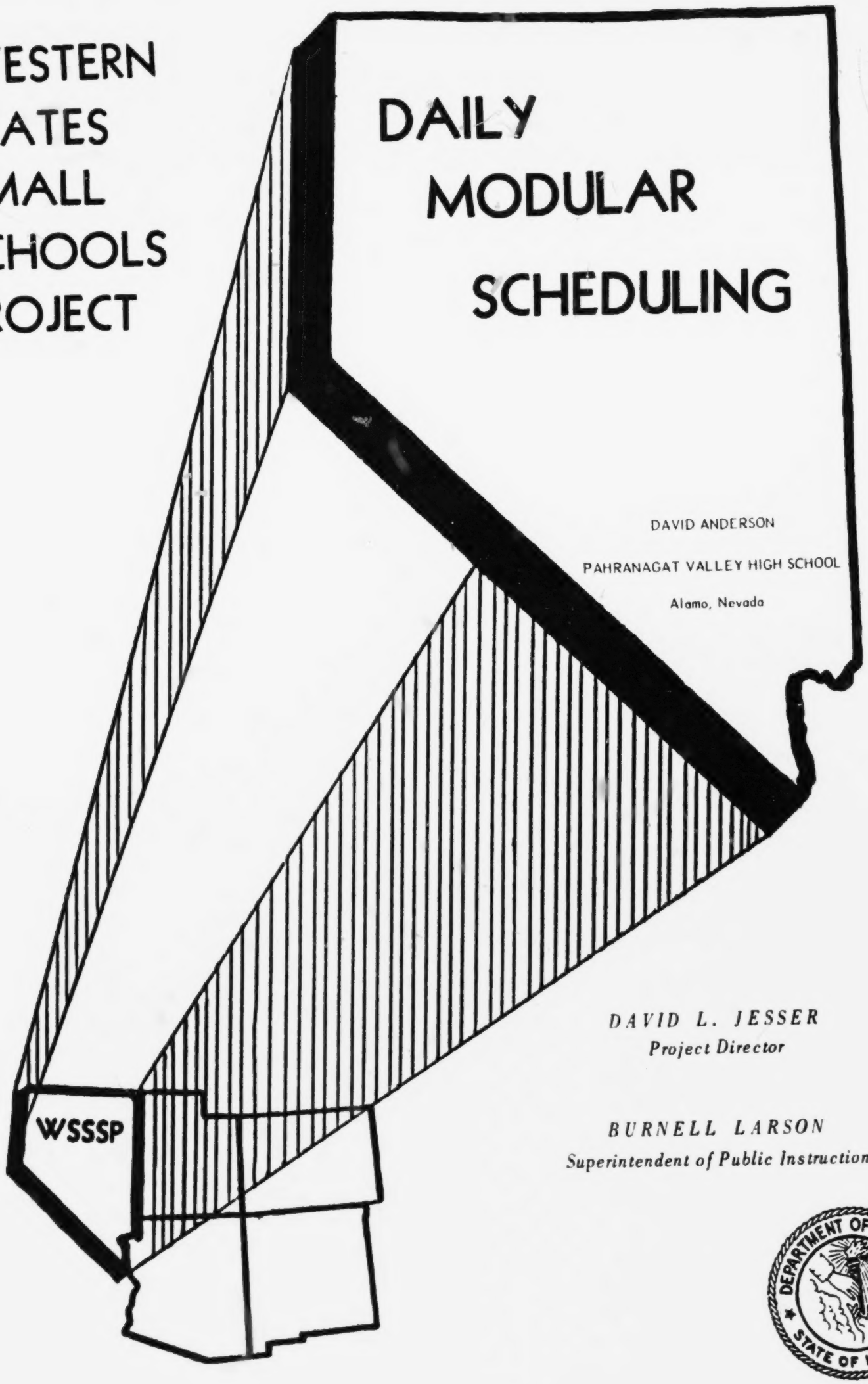
WESTERN STATES SMALL SCHOOLS PROJECT

DAILY MODULAR SCHEDULING

DAVID ANDERSON

PAHRANAGAT VALLEY HIGH SCHOOL

Alamo, Nevada



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DAILY MODULAR SCHEDULING PRACTICE

AT

PAHRANAGAT VALLEY HIGH SCHOOL

- A REPORT -

David Neil Anderson

Alamo, Nevada

ACKNOWLEDGMENT

I wish to take this opportunity of expressing my appreciation to the many people who have contributed their time and energy in furthering this investigation. I am especially indebted to Dr. James C. Davis, my advisor, and to Dr. Dana J. Davis and Dr. George Jeffs for their guidance and help during the writing of this paper.

I would also like to express my sincere appreciation to Mr. Dave Jesser, Director, Western States Small Schools Project for his leadership in innovation, and to Mr. Preston Price, Superintendent, Lincoln County School District for permitting the project to be implemented, and a special thanks to Mr. Edward L. Hansen and Mr. Blaine Allen who helped germinate the idea.

David Neil Anderson

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CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS USED

The explosion of knowledge in the world today makes the challenge of disseminating information one of today's most pressing needs. Heretofore it was possible for one man to assimilate much of the available knowledge. Today, however, this is not true. In fact, knowledge is advancing so rapidly that the ratio between what we know and what is available is widening each day. Passing this knowledge on to others becomes the responsibility of the educational system. How well the dissemination of information is accomplished may well be determined by how effectively educators utilize the school day.

I. THE PROBLEM

Statement of the Problem. The curriculum at Pahranagat Valley High School has utilized such modern innovations as programmed material, multi-class, tele-lecture, and other types of class instruction. Empirical evaluation seems to indicate satisfactory use of these media. In spite of these apparent improvements, the problem of fitting the subject to the school day still exists. Pahranagat Valley High School became a member of the Western States Small Schools Project in 1962. Since that time, experimentation with a hand-generated modular schedule has taken place. The modular schedule seems to provide better utilization of the school day and improve the relationship between subject matter and time. Even with these gains, the problem of individualizing the curriculum still exists.

Importance of the Study. Tradition has led us to assume that classroom procedure and time allotment is much the same regardless of the discipline involved. Little variation has evolved from the basic class structure in the past century. With the introduction of the modular schedule, a new approach to the use of the school day has emerged. The effect this type of schedule is having on education should be explored. It is with this thought in mind that this study is made.

II. DEFINITIONS OF TERMS USED

Modular Scheduling. "A modular concept of course structure is based on the premise that those involved with curriculum planning can determine explicitly what kind of specific learning activities students need to have. The modular concept is then adapted in such a manner that facilitation of those elements (namely: organization of course structure, number of students involved in specific groups, teacher-pupil ratio and specific time allocations) associated with the learning activities become manageable." [1]

Director of Learning: A teacher who diagnoses a student's learning problem and prescribes the necessary material and activities to overcome the

---

[1] Dr. Dwight W. Allen, Modular Scheduling and the Computerized Schedule, p. 9, 1963.

problem. The director of learning devotes time to the following areas: diagnosing, prescribing, gathering material to fit his prescription, guiding discussion and group interactions, directing lectures, small groups, individual learning, laboratories, testing and evaluation, and guidance.

Educational Tools: The educational tools employed in the present investigation include films, filmstrips, programed materials, tapes, television, texts, library material, over-head projectors and machines.

Large Group Instruction: "Any activity in which the learner is involved where he is quasi-active - - listening to a lecturer, filling in a learning program, viewing a film, or taking a test - - can go on in a large assembly group, as well as in any other group size. While these groups are referred to as large groups, it is not their size, but their function which is significant....."[2]

Small Group Instruction: "The second learning group is the one in which the student questions, discusses, clarifies, proposes, and uses his ideas and knowledge. Of necessity this group must be small, generally with only seven to fifteen students. Any more participants in this group would rob the individual of adequate opportunity to discuss and question.....A group this size is manageable in discussion and free enough for questioning. While these groups have been popularly called small groups, it might be helpful to think of them as inquiry groups."[3]

Independent Study: "The third learning activity, and perhaps the most significant, is independent study. Usually independent study is the business of one person, although sometimes two or three work together profitably. This is an informal activity, not scheduled on a regular basis but open for the student to set and use as he sees fit."[4]

Laboratory Group Instruction: "Laboratory has here defined includes those physical facilities for which special equipment and tools are needed to enable students to work independently and in small groups and to practice skills, to experiment, and to apply ideas suggested in large-group instruction....."[5]

Hand-generated: The method used to make a modular schedule by hand. No computer is employed to make the computations. The person making the schedule must eradicate the conflicts that exist and assemble the schedule from the information supplied by the teachers.

Teacher of Subject Matter: A person whose primary function is to disseminate subject matter.

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[2]Manlove and Beggs, "Flexible Scheduling", Indiana University Press, p. 23.

[3]Ibid, pp. 23-24.

[4]Ibid, p. 24.

[5]Bush and Allen, A New Design for High School Education; Assuming A Flexible Schedule, McGraw-Hill Company, New York, p. 37, 1964.

CHAPTER II

REVIEW OF LITERATURE

The space age has dictated a wiser use of our time. Years ago men spent days making journeys which now can be made in minutes. Great changes are an outgrowth of man's realization of the importance of this time. Advancements made in transportation have made the one-room school house a relic of the past. As the one-room school house gave way to the larger complex educational plants of today, the flexible use of time by teachers and students was lost. The teacher in the one-room school was able to make immediate scheduling changes to meet immediate student needs. The students who attended these schools were able to work both in independent study and in non-graded situations. As schools became larger, the organization used to control the students' learning became more rigid. Students were put into what Dr. Frank Cyr calls "train-type learning" - - all on the same track going the same direction, at the same speed. In speaking of this, Mr. Trump writes:

> Small secondary schools possessed some of the advantages of the one-room schools, but these advantages disappeared when schools became larger. Administrators and teachers confused equality of opportunity with uniformity. A smooth running school became the objective. We know the rigid patterns that developed. Classes are of standard size Carnegie units. Administrators developed many kinds of quantitatively defined institutional arrangements for learning and for dealing with teachers.
>
> Finally, however, we are beginning to recognize and learn ways to cope with the problem. We are returning the use of time, space, number, and content to those who need it - - the teachers and their students. This is happening even in the larger schools that symbolize so wonderfully well our concept of education for all youth. At the same time, we are learning how to cope with another equally important problem; How can one treat a pupil as an individual even though he is one in a great mass of students? Solving those two problems constitutes the exciting challenge of our day.[6]

A modern educational system, like changing industry, must retool to meet the demands of a modern world. Any such retooling must take into consideration the two problems spoken of by Dr. Trump. These two problems can be stated in many ways, but seem always to involve utilization of the school day and individualizing the curriculum to meet the individual need of the students. Several schools have succeeded in advancing education from its rigid structured curriculum, controlled by time, to a flexible curriculum designed to better utilize the school day. Such advancements have helped to make the time and schedule a servant of the teacher rather than master of the curriculum. Individualization of the curriculum cannot effectively take place until teachers and students have a strong voice in the utilization of the school day.

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6 J. Lloyd Trump, "Flexible Scheduling, Fad or Fundamental?" Phi Delta Kappan, May, 1963, p. 86

The modular scheduling concept was born of the frustration of trying to break away from the restrictions imposed by our rigid traditional schedules. Recognizing this, professors Robert Bush and Dwight Allen of Stanford University began to study flexible scheduling several years ago. Bush and Allen in 1965 completed, with electronic computers, scheduling more than fifteen schools. Flexible scheduling was started in the Eastern part of the United States by the computer and educational staff at Massachusetts Institute of Technology. The two scheduling centers differ in that Massachusetts Institute of Technology wishes to utilize the machine to a greater extent while Stanford University wished to sacrifice machine time in favor of faciliting the educational philosophy.

Several educators have been leaders in introducing new scheduling concepts to the public schools. A brief review of four major problems is included in this chapter.

I. DR. J. LLOYD TRUMP

The ideas of Dr. J. Lloyd Trump have provided inspiration for many educators and projects throughout the United States. In the book, Flexible Scheduling, by Donald C. Manlove and David W. Beggs III, the authors state:

> The genesis of this construct is not ours. It came from Dr. J. Lloyd Trump. Others may have added to it but he outlined it clearly in his provocative booklet, Images of the Future. Of course, he is not responsible for any flaws in this presentation. He gave the initial impetus to make the schools different and better. We are attempting to add fuel to Dr. Trump's fire with this guide to implementation.[7]

Dr. Trump, in speaking to the Conference on "New Directions for the American High School" at Stanford University, July 8-9, 1958, stated:

> Two substantial barriers to improvement exist which have not been the object of substantial study and change. Actually there has apparently been little interest or concern about making changes in these areas. The two barriers referred to are (1) changes in the schedule of the classes and (2) the methods in which staff members of the school are utilized... How can substantial break-throughs be made against these barriers of scheduling and staff utilization? Experimentation is needed in at least three areas: (1) with regard to a new theory of instruction which would be implemented by substantial changes in the class schedule; (2) changes in staffing which would involve new definitions and types of teacher roles and personnel; and (3) acceptance of new aids to learning which would involve changes and additions in the use of electronic and mechanical avenues to information and understanding.....[8]

II. DR. DWIGHT W. ALLEN

Dr. Allen, Assistant Professor of Education at Stanford University, conducted a workshop on modular scheduling at Las Vegas, Nevada, for the Western States Small Schools Project in 1962. At this conference the idea of a modular schedule concept was introduced to project schools in Utah, Arizona, Colorado, New Mexico, and Nevada. Dr. Allen explained the methods used in making a schedule. Pahranagat Valley High School's modular scheduling practices are the result of this conference.

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[7]Donald C. Manlove and David W. Beggs III, "Flexible Scheduling", Bloomington, Indiana: Indiana University Press, 1965, p. 12.

[8]J. Lloyd Trump. "New Directions in Scheduling and Use of Staff in High Schools", California Journal of Secondary Education, October, 1958, Vol. 33, No. 6, pp. 363-364.

Dr. Allen has written many articles on modular scheduling. He was co-author with Dr. Robert N. Bush of the book, A New Design for High School Education, Assuming a Flexible Schedule. This work has become a major authoritative source for flexible modular scheduling.

Bush and Allen's book presents seven assumptions about curriculum study and flexible scheduling:

1. High school is the period of schooling typically included in grades 7 to 12.

2. All students should have continuous, rigorous study in breadth and depth in all basic subject-matter fields throughout the six secondary school grades. These fields are:

   a. Arts (visual, performing, practical).
   b. Languages (English and foreign).
   c. Mathematics.
   d. Natural Sciences.
   e. Physical Education and Health.
   f. Social Sciences.
   g. Guidance.

3. In each subject area several groups of students whose needs are sufficiently distinct to require a discrete program of studies can be identified.

4. Each subject, when properly taught, will include four basic types of instruction:

   a. Independent and individual study.
   b. Small-group instruction.
   c. Laboratory instruction.
   d. Large-group instruction.

5. Adequate instruction in each subject-matter field requires senior teachers who are both well trained in their subject-matter field and highly skilled in teaching and who are assisted by less highly trained members of the instructional and supporting staff.

6. Class size, length of class meeting, and the number and spacing of classes ought to vary according to the nature of the subject, the type of instruction, and the level of ability and interest of pupils.

7. It is possible to obtain scheduling assistance through the use of data-processing equipment in order to implement a large degree of schedule flexibility.[9]

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[9] Dwight W. Allen and Robert N. Bush, A New Design For High School Education. New York: McGraw-Hill Book Company, 1964, pp. 7-8.

III. EUGENE R. HOWARD - SUPERINTENDENT
RIDGEWOOD HIGH SCHOOL
NORRIDGE, ILLINOIS

Ridgewood High School was built to implement many of Dr. Trump's ideas. Ridgewood High School, supporting a student body of 1150, has successfully operated a modular schedule since 1960.

Eugene R. Howard, Superintendent-Principal, of Ridgewood High School states:

> The Ridgewood schedule of 1963-64 was the country's first computer-built modular schedule for a team teaching high school.... The objective of the Ridgewood schedule is to implement the following six operating principles, which are considered basic by the Ridgewood staff. These principles are gradually replacing the false premises upon which so many high school schedules are built today. Briefly stated, the principles are that:
>
> 1. The size of a group shall be appropriated to its purpose.
>
> 2. The composition of a group should be appropriate to its purpose.
>
> 3. The time allotments assigned to any group must be appropriate to its purpose.
>
> 4. The physical and psychological environment must be appropriate to the activities of the group.
>
> 5. The nature of a task assigned to a staff member must be appropriate to his talents and interest.
>
> 6. The nature of the supervision provided for a group depends on the nature and the purpose of the group.[10]

IV. BLAINE ALLEN - PRINCIPAL
VIRGIN VALLEY HIGH SCHOOL
MESQUITE, NEVADA

Virgin Valley High School is a secondary school enrolling about 150 students, (grades 7 - 12) in a rural area East of Las Vegas, Nevada. Virgin Valley High School was the first school in Nevada to attempt modular scheduling with a computerized system. Principal Blaine Allen, has written two reports on modular scheduling titled: Modular Scheduling and the Computerized Schedule and Individualized Learning Through Computerized Modular Scheduling. The first report is a descriptive outline of flexible scheduling using the data-processing method. The second report cites the contribution which computerized scheduling makes toward the more rapid development in each student of "a

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[10] Eugene R. Howard, The High School Journal, January, 1965, pp. 283-285.

possible and workable self-image." These works were published by the Nevada State Department of Education in co-operation with David Jesser, Nevada Director for the Western States Small Schools Project.

Virgin Valley High School was one of the first schools in the nation to use computerized schedule and the fifth school scheduled by the Stanford School Scheduling System. The Clark County School District of Southern Nevada commissioned Virgin Valley High School as a pilot school for the study of modular scheduling. Other schools in the Clark County School District have since adopted the practice of modular scheduling.

SUMMARY

The material review shows the practical aspect of scheduling schools by the use of a computer. Mr. Blaine Allen has shown how a small high school can make major curriculum changes by using the modular concept of course structure.

While associating with Dr. Dwight Allen and Mr. Blaine Allen this author became convinced that a machine is not an absolute necessity in making a modular schedule. Additional support of this idea was contributed by Dr. Don DeLay in speaking to the Western States Small Schools Project workshop, held at the University of Nevada on June 11, 1966. Dr. DeLay directed his remarks to the topic Small Schools Can be Good Schools and stated the following: "The small high school with an open schedule would seem to afford an excellent opportunity for educational development that may prove to be of value to schools of any size; conversely, the old panacea for all small schools ills - - make them big schools - - is not always applicable, with due apologies to Dr. Conant." Dr. DeLay went on to say that small schools can hand generate their modular schedules.

The next chapter is included to develop a basic understanding to a modular schedule concept.

CHAPTER III

BUILDING A MODULAR SCHEDULE

INTRODUCTION

An explanation has been developed by Dr. Dwight W. Allen[11] of the step by step development of the modular scheduling concept; a knowledge of this basic concept is necessary in the construction of a modular schedule.

I. DEVELOPING A MODULAR CONCEPT OF COURSE STRUCTURE

Tradition has led us to assume that each class offering is structured like every other class offering, i.e., each class is composed of thirty students and meets about fifty minutes daily. Little variation has evolved from this basic format of secondary education established over one hundred years ago in the Boston Grammar School. Nevertheless, educators will agree that all curricular offerings should be taught in a manner which maximizes the ability to learn - - and that this probably is not possible for all subjects in the same structural format.

The purpose of the accompanying worksheets and examples is to help conceptualize a new approach to course structure - an approach build upon the concept of a modular schedule with the assumption that widely variant course structures are appropriate.

A modular concept of course structure is predicated on the premise that those involved with curriculum planning can determine explicitly what kinds of specific learning activities students need to have. The modular concept is then adapted in such a manner that the facilitation of those elements (namely: organization of course structure, number of students involved in specific groups, teacher-pupil ratio and specific time allocations) associated with the learning activities becomes manageable.

II. THE CURRICULUM MAY BE CONSIDERED A FUNCTION OF AREA

The entire curriculum can be thought of as an area to be scheduled. The horizontal dimension represents the number of students, the vertical dimension represents the length of time. If the school has eighteen hundred students and the school day lasts from 8 A.M. to 4 P.M., the curriculum area is divided horizontally and vertically. This is shown in Figure 1.

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[11] Dr. Dwight W. Allen, Assistant Professor of Education, Stanford University.

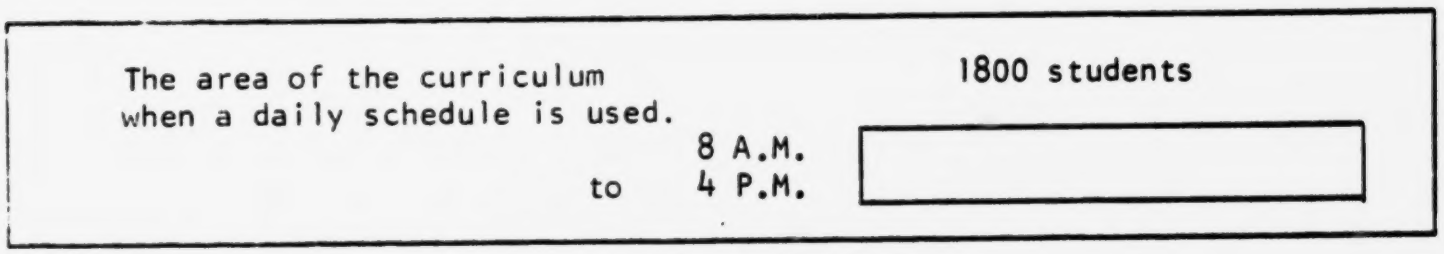


FIGURE 1. Curriculum Area

If a weekly schedule is used, the curriculum area is expanded. This is shown in Figure 2.

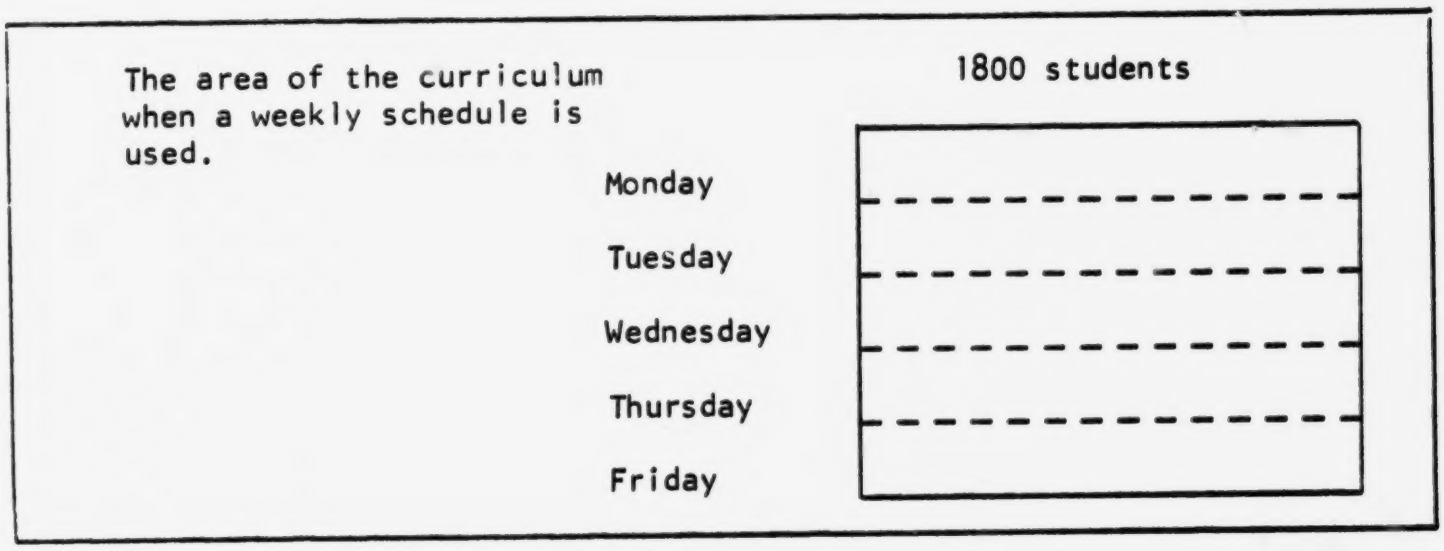
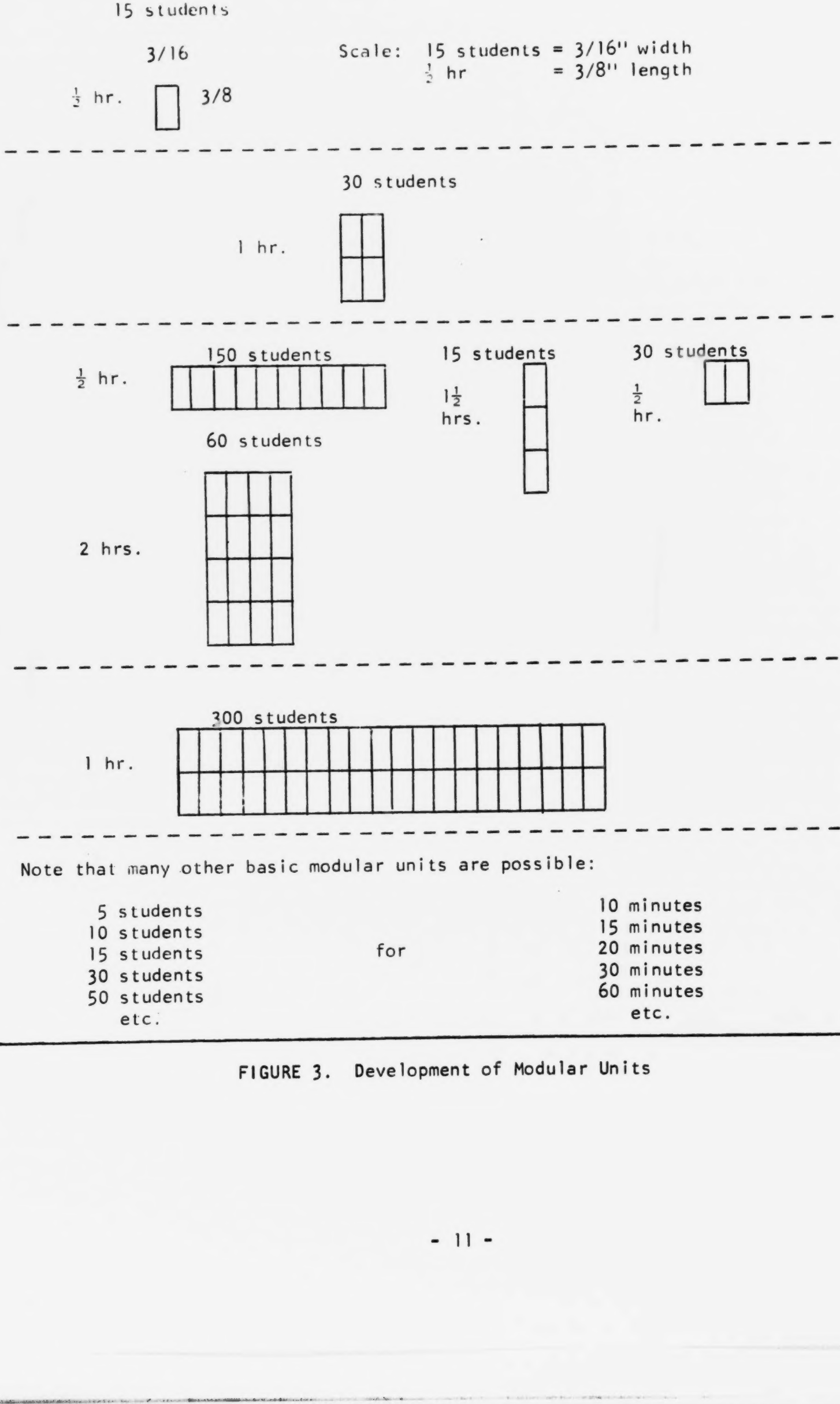


FIGURE 2. Curriculum Area Expanded

III. THE CONCEPT OF MODULAR UNITS IN CURRICULUM PLANNING

The curriculum, conceived as an area to be scheduled, is made up of sub-parts called modular units which are derived from units of time and numbers of student schedules. The modular unit chosen for time should be chosen according to the smallest amount of time that is desired for any instructional purpose. If 40 minute, 60 minute, or 120 minute classes are desired, a 20 minute module would be appropriate. The number of students selected should be also stated in terms of desired class sizes. A ten-student module would accommodate classes of 10, 20, 30, 40, etc. Though any modular unit can be selected for either period length or class size, it is desirable to select as large a modular unit as appropriate to reduce the complexity of scheduling.

One possible modular unit is that of 15 students meeting for a single half hour period. Thus a "class" of 30 students meeting for an hour (conventional class unit) would appear as a multiple of the modular unit. A wide variety of structures is possible, as being multiples of the basic modular unit. These different modular arrangements are shown in Figure 3.



Note that many other basic modular units are possible:

5 students		10 minutes
10 students		15 minutes
15 students	for	20 minutes
30 students		30 minutes
50 students		60 minutes
etc.		etc.

FIGURE 3. Development of Modular Units

Modular units that have been considered by school districts for planning are:

15 students for 30 minutes
15 students for 20 minutes
30 students for 15 minutes
15 students for 25 minutes
10 students for 10 minutes

The smaller the modular units, the greater the flexibility - - but also the greater the complexity.

With a foundation for modular scheduling it is now possible to construct a hand-generated modular schedule. The modular schedule used at Pahranagat Valley High School in 1963-1964 (See Appendix A) and 1964-1965 (see Appendix B) were hand-generated. A knowledge of how this type schedule is made is essential before an understanding of a daily schedule can be expected.

CHAPTER IV.

DEVELOPING A HAND-GENERATED MODULAR SCHEDULE

INPUT INFORMATION

A. Teacher Course Assignments. (1963-64)

Teacher	Course
Anderson	Principal Algebra I Geometry Algebra II Advanced Math (Programed)
Sullivan	Team Teaching: English X (reading) Government Boys P.E. Type Physics General Science General Math (Programed)
Chase	English X Team leader English 7-8 American History English 9 English 10 English 11-12
Joslyn	Advanced Home Ec. Girls P.E. Spanish Home Ec. 9 Family Relations Team Teaching: English X (2600-3200 programed)
Hansen ($\frac{1}{2}$ day)	Agriculture 9 Agriculture 10 Agriculture 11-12

B. Course Structure

In making a schedule for a small school, each teacher structures his class according to what he determined to be the needs of his class. The focal points of the class structure center about four considerations.

1. Class title
2. Student desired
3. Number of meetings per week

4. Length of each meeting in modules

Following is the class structure designed by Mr. Chase.

Class Title			
English X (Vocabulary)	9-12	1	3 modules
English X (Programed)	9-12	1	2 "
English X (Reading)	9-12	1	2 "
English 9	9	1	3 "
English 10	10	3	2 "
English 9	9	2	2 "
English 11-12	11-12	1	3 "
English 11-12	11-12	3	2 "
English 708	7-8	5	3 "
History	11-12	1	1 "
History	11-12	3	2 "
Library	open	2	3 "
Paper	elective	1	3 "

The following steps have proved useful in the construction of the master schedule:

1. The five days of the week using the modules of time desired were laid out on a large gridded paper. A 20 minute module was used in 1963-64 and a 15 minute module in 1964-65.

2. The classes that included the entire student body (X classes) were placed on the schedule first.

3. The large blocks of time which cross class (freshman, sophomore, etc.) lines were included next.

4. The classes which cross class lines and the large blocks of time were listed next.

5. The smaller blocks which do not cross class lines were included last.

In appendix A and appendix B are the actual schedules used for the 1963-64 and 1964-65 academic years at Pahranagat Valley High School.

CHAPTER V

BUILDING A DAILY MODULAR SCHEDULE

It is the position of this paper that the possibility for individualizing the curriculum is greatly increased by using a daily modular schedule. The daily modular schedule presently used at Pahranagat Valley High School was developed from knowledge gained in constructing the schedule presented in Chapter IV. The procedure for constructing a daily schedule follows: At the end of each day, each teacher submits to the scheduling office his teaching program for the following day. All programs are correlated and assembled into a master schedule and posted throughout the school.

The daily modular schedule of Pahranagat Valley High School is based on the following assumptions:

1. The teacher's role can change from "Teacher of Subject Matter," to "Director of Learning."

2. The schedule can be changed from master of the curriculum to servant of the teacher.

3. Students can be taught to utilize their time and can accept responsibility for their own learning.

4. Learning itself is motivation.

5. Students enjoy learning when it is geared to their level.

6. A teacher can direct learning beyond his mastery of the subject.

7. Students can be taught principles and laws applicable to real life situations as well as to subject matter.

8. Teachers should not do those things which can best be done by educational machines, or secretarial help.

9. Complete flexibility can be achieved:

   a. When teachers rather than administrators are given responsibility for determining the amount of time needed to teach given concepts or blocks of subject matter.

   b. When students are given sufficient time for independent study and responsibility for the use of that time.

The daily modular schedule employed the following types of instruction.

I. TYPES OF INSTRUCTION

Large Group Instruction

Examples:

1. Illustrated lecture.
2. Making assignments.
3. Testing.
4. Guest speaker or resource person.
5. Televised lesson.
6. Motion picture.

Purposes:

1. Conserve teaching time.
2. Improve quality of instruction.
3. Use resource persons.
4. Efficient use of audio-visual.
5. Efficient use of facilities.

Physical Facilities:

Writing boards or chairs with arm for writing available for large group.

Small Group Instruction (Groups of students having the same interests.)

Examples:

1. Analytical discussion.
2. Exploratory discussion.
3. Reporting.
4. Testing of understanding.
5. Tele-lecture.

Illustrative purposes:

1. To provide opportunity - -

   For individual participation.
   To discuss ideas raised in large-group or laboratory discussion.
   For close student-teacher relationship.
   To test effectiveness.
   For grouping of pupils.

Physical Facilities:

Table and chairs.

Laboratory Group Instruction.

Examples:

Science Lab.	Libraries
Language Lab.	Social Studies Lab.
Math Lab.	Office Machines
Art and Shop.	Instructional Materials

Types of Labs:

1. Experimental.
2. Drill.
3. Application.
4. Research.

Physical facilities are unique for each type of laboratory.

Independent Learning

Examples:

1. Reading.
2. Writing.
3. Drill.
4. Conferences.
5. Memorization.

Purposes:

1. Promote independence.
2. Provide opportunity for study under optimum conditions.
3. Provide opportunity for study of topics beyond regular curriculum.
4. Permit maximum use of instructional resources.

Physical Facilities required:

1. Library.
2. Laboratory.
3. Study rooms.
4. Individual study alcoves.

II. THE SCHEDULE

Teachers' Daily Request Form. (Form 1) (Appendix C page 46)

All teachers desiring time for their teaching programs the following day must submit their requests on Form 1, the Daily Request Form. This form requires the following information:

1. Subject: The class to be taught.

2. Topic: To be taught in a given class period.

3. Methods used to teach said topic:

   a. Lecture or tele-lecture.
   b. Discussion.
   c. Film.
   d. Independent study.
   e. Laboratory.

4. Discussion number: In some classes, a given discussion is conducted three and four or, perhaps, more times. In order for a student to know when a given discussion will take place and the remaining number of opportunities he will have to attend the discussion, such a discussion is assigned two numbers. The first digit indicates the number of lectures to date. The last digit indicates the number of times the discussion will be conducted. For example, 1-3 designated the first of three performances; 2-3 designates the second of three performances; 3-3 indicates the last of three performances.

5. Modules of time: The school day is divided into fifteen minute modules. Each teacher submits the number of modules he desires for each of his classes. If he desires certain modules at a specific time of the school day, he so indicates. However, in actual practice, a teacher makes his requests for time in minutes rather than modules. It should also be noted that a teacher often needs less time than the module system allocates. If a teacher needs thirty-five or forty minutes he requests forty-five minutes (three modules). If the teacher completes his presentation in thirty-five minutes, he excuses the students the remainder of the module for independent study either within the classroom or at the instructional center.

6. Student requested to attend: This space allows the teacher to request that specific students attend either to assist the teacher or because, in certain cases, past experience indicates that a student would not attend an important discussion or activity on his initiative.

7. Students requested to make appointment: This is the lower portion of Form I and is used by the teacher to request students to make appointments for teacher consultation. It includes the student's name, subject involved, and the length of the appointment.

Constructing the Daily Schedule. (Form 2) (Appendix C page 46)

After teacher requests are received, the master schedule is constructed. The master schedule requires about ten to twenty minutes to assemble. Construction of a master schedule involves the following steps:

1. Assemble the teachers' and students' requests.

2. Place first on the schedule those classes which must occupy a specific block of time, e.g., the gymnasium is shared with the

elementary school making it necessary for physical education to be conducted daily from 11:30 to 12:30. The band teacher is hired part time and can teach, only from 3:15 to 4:00 P.M.

3. With the aid of a conflict schedule (see p. 20) place the remaining classes on the schedule beginning with those classes which cross class lines, and those which involve large blocks of time (see Appendix D page 52).

4. Schedule small blocks of time.

5. Make the final copy of the schedule from the work copy and post same by 4 P.M.

Students may also desire to make requests for time, e.g., for student council, executive council, club and class meetings. Students are asked to make these requests on the request form submitted by their advisor. (Appendix D page 52).

Special Announcements. (Form 3) (Appendix C page 46).

Special announcements are made on Form 3 from information submitted on Form 1. Students who are requested by teachers to make appointments may learn of such requests by reviewing Form 3 posted with the Daily Schedule (Form 2).

Student's Daily Schedule. (Form 4) Appendix C page 46).

Each student should obtain Form 4 at the beginning of each week or Friday of the previous week. When the schedule for Monday is posted, the student, prior to his first class Monday morning, fills in his daily schedule for Monday only. The student indicates his activities for each module of the school day and notes what he intends to do with his independent time. He then uses his schedule throughout the day to guide his activities. The student repeats this procedure each day of the week. The schedule is also used for making appointments with teachers (Form 5). Each student at the end of the week leaves his daily schedule at the scheduling office for filing.

Teachers Appointments. (Form 5) (Appendix C page 46).

Form 5 is posted in each teacher's room and is accessible to all students. After the Daily Schedule (Form 2) is posted, each teacher marks off those modules on Form 5 during which he will not be available for appointments. Any student needing teacher consultation places his name in the module during which both he and the teacher will be free. Students whose names appear on Form 3 must make appointments with the teacher concerned before leaving school that day. These appointments, are made on Form 5.

III. CONFLICT SCHEDULE

The conflict schedule is necessary for the daily production of a Daily Modular Schedule. It lists the classes which do not conflict with each other, i.e., classes whose enrollments do not over-lap. The following list contains a step-by-step development of a Conflict Schedule:

1. List all of the students' names by class (freshmen, sophomore, junior, senior).

2. Give each student a different number. Reserve separate number sequences to designate freshmen, sophomores, juniors, and seniors. For example, at Pahranagat Valley High School, the numbers from one to nineteen are reserved for freshmen, twenty to forty-nine for sophomores, fifty to fifty-nine for juniors, and sixty to sixty-nine for seniors (see page 38). Use odd numbers for girls, even numbers for boys.

3. Make a roll of all classes taught listing each student's number rather than his name.

4. Construct the Conflict Schedule using the roll described in Step 3. Provided a column on the conflict schedule for each teacher. Under the first teacher listed, assemble all of his classes in any order desired. Print or underline each class in red. In the remaining teacher's columns, list in black opposite each of the first teacher's classes all of the remaining teachers' classes whose enrollments do not conflict with the respective classes in the first column. (It should be noted that enrollments of classes not listed in red on a given line may conflict with each other, but not with the enrollment of the class listed in red.) The same procedure is repeated for each teacher in turn. However, note that all teachers' columns remain in the same order, i.e., the second teacher's classes in turn are listed in red in the second column, the third teacher's classes in turn are listed in red in the third column, etc., until the Conflict Schedule is complete for every teacher.

CONFLICT SCHEDULE

Student Numbers

GRADE 9

MAUREEN NELSON 1

YVONNE STEWART 3

RONNIE FOREMASTER. 2

EVAN GOULETTE. 4

BOBBY HOSIER 6

MARK WRIGHT. 8

DELBERT WALCH. 10

GRADE 10

DEANNA DAVIS. 21

VERA DELL HIGBEE. 23

STEVEN ANDERSON 20

PAT FALVEY. 22

CYRIL HOLADAY 24

RICKY HARDY 26

RANDEE RODERICK 28

BRUCE SHUMWAY 30

DEE SIDES 32

MIKE ZAMORA 34

GRADE 11

DARLA MOUNGER. 51

SHERIDA SHUMWAY. 53

DANA STEWART 55

BILL HERRING 50

VANCE HIGBEE 52

BRADLEY MANN 54

JIM PERKINS. 56

LOGAN WRIGHT 58

GRADE 12

MARILYN BINGHAM 61

LETITIA NESBITT 63

BRENT BUCKLES 60

JIM JENKINS 62

NORMAN KAZE 64

CONFLICT SCHEDULE

Class Rolls

Family Relations	60-61-62-63-64
Home Ec. 10-12	21-23-51-53-55-61-63
Home Ec. 9	1-3
French I	1-3-2-6-8-23-51
French II	21-20-26-55-58
Type I	1-2-3-6-8-20-32-34
Type II	23-51-53-55-50-52-56
General Science	1-3-2-4-6-8-10-24
Chemistry	50-52-54-56-58
American History	53-55-50-52-54-56-58-61-62-64
World History	10-21-20-22-26-28-30-32-34
Geometry	21-23-20-22-26-55-50-54-56-58
Algebra I	1-3-2-6-8-28-32
Programed Math	30-34
General Math	4-10-60
Structures	26-28-32-34-54-56-58-60-62-64
Plant Science	20-22-28-30-58
Ag. 9	2-4-6-8-10-24
Band	1-2-3-6-8-21-23-20-26-30-32-51-55-50-52-56-58-61
Not in Band	4-10-22-24-28-34-53-63-62-64-60
English 9	1-3-2-4-6-8-10
English 10	21-23-20-22-24-26-28-30-32-34
English 11-12	51-53-55-50-52-54-56-58-61-63-60-62-64
P. E. Boys	
P. E. Girls	

CONFLICT SCHEDULE

Teacher Assignments

JOSLYN	SULLIVAN	ANDERSON	HANSEN
Family Relations Home Ec. 10-12 Home Ec. 9 French I Type I	Chemistry	Algebra I Programed Math General Math	English 9 - 10 Ag. 9
Home Ec. 9 Type I	American History	Algebra I Programed Math	Ag. 9
Family Relations Home Ec. 9 French I Type II	World History		
Family Relations Home Ec. 9		Geometry	Ag. 9
Family Relations Home Ec. 10-12 French II Type II	Chemistry American History	Algebra I	Structures Plant Science
Home Ec. 10-12 Home Ec. 9 French I	General Science Type (56)	Algebra II	Structures
Family Relations Home Ec. 9 Home Ec. 10-12 French I Type II	General Science Chemistry (58) American History (58)	Algebra I General Math	Plant Science
Family Relations Home Ec. 9 Home Ec. 10-12 French II Type II	Chemistry American History World History (10)	Geometry Programed Math	Ag. 9

CONFLICT SCHEDULE

COMPLETED

Family Relations	General Science Chemistry World History	Geometry Algebra I	Plant Science Ag. 9 English 9-10
Home Economics 10-12	Chemistry	Albegra I General Math Programed Algebra	English 9 Structures Plant Science Ag. 9
Home Economics 9	Chemistry American History World History	Geometry	English 10-11-12 Structures Plant Science Ag. 9
French I	Chemistry American History World History	Programed Math General Math	Structures Plant Science
French II	General Science	Algebra I Programed Math General Math	Ag. 9 English 9
Type I	Chemistry American History		English 11-12
Type II	General Science World History	Algebra I Programed Math General Math	Structures (56) English 9
Family Relations Advanced Home Ec. French II Type II	General Science	Geometry Programed Math	Structures Plant Science English 11-12

CHAPTER VI

EVALUATION OF THE DAILY MODULAR SCHEDULE

OF THE PAHRANAGAT VALLEY HIGH SCHOOL

The hand-generated daily modular schedule as implemented at Pahranagat Valley High School made available a variety of learning opportunities. These increased learning opportunities are provided through additional course offerings as well as through modification of the structure of various courses. This modification of course structure has attempted to identify the learning activities which can best hold place in large groups, small groups, labs, and independent study situations.

Because of the increased number of learning alternatives available, the opportunity exists for students to make decisions concerning their educational programs. These decisions relate to the following: (1) courses to be taken; (2) types of activities within these courses; (3) and extent of activities in any given course as related to independent study time. In summary, the school is providing an opportunity for students to become more self-directed in terms of their use of time as it relates to education. Although no conclusive evidence is available at this time, there are indications which would suggest that students are adapting more easily to situations which require increased self-direction.

Because the daily schedule has encouraged the filtering out of the curriculum, those learning activities which are most appropriate to group instruction, a considerable portion of the school day can be devoted to independent study. Independent time provides time for teachers and students to interact concerning problems and also provides a more efficient use of the school day.

Teacher control of the course structure, including time used each day, has made group presentations more intense, concentrated, enriched, and less frequent. This new use of the school day has resulted in fewer discipline problems as well as better school attendance.

Experience with the daily modular schedule at Pahranagat Valley High School has proven encouraging as the time and the resources of the school are being more efficiently mobilized toward the goal of the best education for each individual. Instruction is becoming more nearly individualized and the function of the teacher more efficiently utilized. The evaluation utilized the observations and reactions of the faculty, and some factual student abstracts.

OBSERVATIONS

1. The daily modular schedule has decreased the amount of time that a student or teacher is scheduled for classes. This arrangement facilitates flexibility, making possible teacher-student

conferences and teacher-special group discussions. The teacher, counselor or principal may schedule groups of students on a daily basis without disturbing classes.

2. The schedule has economized the teacher's time by allowing the time allotment and class size allotment to be dictated by the mode of instruction which the teacher uses.

3. Daily scheduling has enabled students of higher academic ability to take more than the usual number of courses plus taking part in other learning experiences within the school day.

4. Students need not take daily assignments home if they use independent study time.

5. Teachers have to be diligent to make a daily flexible schedule successful.

6. Teachers need to change concepts of the use of facilities.

7. Teachers must plan for implementing wise student use of independent study time, such as development of student study guides and long term assignments.

8. Self-directing activities and materials become more important.

9. Administrators and teachers need to prepare psychologically for more student motion.

The daily modular schedule has resulted in a unifying involvement of students, teachers, and members of the professional staff in curriculum decisions.

EVALUATION AS COLLECTED FROM STUDENTS (ADVANTAGES)

1. You can work at your own rate of speed.

2. It's not boring.

3. More responsibility (on the students part).

4. There's no teacher continually standing over you.

5. It gives you a day-to-day change.

6. There is more free time.

7. The students learn to work on their own, without having to be continually helped.

8. If you don't get your work in, you are to blame, the teachers don't keep reminding you.

9. Gives one a sense of freedom.

10. You have different things to look forward to.

11. Prepares you for college better.

12. This is working out better than any other schedule. (better all around)

13. The way the noon hour is (with ice cream) it gives you a chance to relax and get back to work.

14. You can take breaks from working. I think this is good because you can refresh your mind.

15. You can make appointments with the teachers if you need them.

16. The teachers take more personal interest in the students.

17. There is not as many restrictions as some schools have. This, I think is good. Rules (too many) make students hateful and rebellious towards school.

EVALUATION AS COLLECTED FROM STUDENTS (DISADVANTAGES)

1. There is not enough up-to-date information on the subjects taught.

2. Some students are not using their time wisely.

3. It's hard to find a really quiet place to study.

4. Freshmen should have more scheduled time, Sophomores less, and Juniors and Seniors should have 50% or more of their time unscheduled.

5. Students should get to class on time.

6. There is too much scheduled time some days.

ADMINISTRATIVE COMMENTS

The past eight years this author has tried many different types of schedules, including a so called traditional schedule of six periods each fifty-five minutes long. In attempting to find ways to better utilize the school day a schedule which rotated the classes through seven periods with each period of a different length was tried; ultimately, this schedule evolved from a rotating scheduling concept, to the daily modular scheduling practices presently being used.

Evolution seems necessary in educational change. If a school desires to innovate a new scheduling concept, the following are possible areas of concern:

1. Can you define clearly your reason for wanting a transformation of schedules?

2. Have you considered and made allowances for staff acceptance and approval?

3. Are you oriented to the scheduling process?

4. Have you involved yourself in the following steps?

   a. Studied available literature on scheduling?

   b. Involved the school administration?

   c. Visited schools using similar schedules?

   d. Reviewed the physical structure of the school plant?

   e. Oriented the community to innovation?

   f. Prepared the student for change?

After the successful use of a daily modular schedule for a one year period, the possibilities it opens in education seem exciting. It is possible now that the schedule no longer dictates the mode of instruction, to teach the student.

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APPENDIX A

The schedule used at Pahranagat Valley High School in the year 1963-1964 was a hand-generated modular schedule. This type of schedule has been referred to as being flexible; however, when the schedule is once constructed it is no longer flexible but is as rigid as the so called traditional schedule. It was the encounter from working this schedule and the 1964-1965 schedule that made it possible to move into what we call a daily modular schedule; a schedule which seems completely flexible. This schedule is built using a twenty minute module. At the end of each module a record player would start and music play in each room for two and one half minutes.

APPENDIX

PAHRANAGAT VALLEY HIGH SCHOOL 1963-1964

MONDAY SCHEDULE

	ANDERSON	SULLIVAN	CHASE	JOSLYN	HANSEN
9:00 ---- ---- 10:00	Algebra I	General Math	English 7-8	Home Ec. Advanced	Ag. 11-12
---- ---- 11:00	Geometry	Government	English Study	Girls P.E.	Ag. 9
	Office	Type	History	Spanish	Ag. 10
12:00	NOON				
1:00	Office	Boys P.E.	Library	Home Ec. 9	Ag. Projects
		Physics	English 9	Spanish	
2:00	Algebra II	General Science	English 11-12	Study	
3:00	Advance Math		English 10	Family Rel.	
4:00	ENGLISH X 2600-3200 Reading				

Faculty Meeting

TUESDAY

	ANDERSON	SULLIVAN	CHASE	JOSLYN	HANSEN
9:00	Algebra II	Science Lab.	English 7-8	Spanish Mr. Christensen	
10:00	Avanced Math	Government	English 10	Home Ec. 9	Ag. 9
11:00	Office	Study	English 9	Family Rel.	Ag. 10
12:00	NOON				
1:00	Algebra I	Physics	English Study	Home Ec. Advanced	Ag. 11-12
2:00	Geometry	General Science	English 11-12	Spanish Lab.	
3:00		Type			
4:00		Boys P.E.	Library	Vocational Projects	

WEDNESDAY

	ANDERSON	SULLIVAN	CHASE	JOSLYN	HANSEN
9:00	English X All Students 2600-3200		Reading		
			History	Spanish	
10:00	Algebra I	Government	English 10	Spanish	
11:00	Office	Boys P.E.	English 7-8	Study	
12:00	NOON				
1:00	Office	Study	English 9	Family Rel.	Ag. 10
		Type	English 11-12	Home Ec. 9	Ag. 9
2:00		Physics	English Study	Spanish Lab.	Ag. 11-12
		General Math			
3:00	Geometry	General Science		Home Ec. Advanced	
4:00					

THURSDAY

	ANDERSON	SULLIVAN	CHASE	JOSLYN	HANSEN
9:00	Algebra II	Physics	English 7-8	Spanish Christensen	Ag. Projects
10:00	Algebra I	Study	English Study	Family Rel.	Ag. 10
11:00	Geometry	General Science		Home Ec. Advanced	Ag. 11-12
12:00	NOON				
1:00	ENGLISH X Vocabulary Building				
2:00	Office	General Math	History	Spanish	
3:00		Type Boys P.E.	English Study	Girls P.E. Glee Mrs. Hardy	
4:00					

Faculty Meeting

FRIDAY

	ANDERSON	SULLIVAN	CHASE	JOSLYN	HANSEN
9:00	Student Council	Yearbook	Paper	Spanish Lab.	
10:00	Algebra	Type	English 11-12	Study	
11:00		Boys P.E.	English 7-8	F.H.A.	
12:00	NOON				
1:00	Advanced Math	Government	English Study	Girls P.E.	F.F.A.
	Office	Study	History	Home Ec. 9	Ag. 9
2:00	Math Lab	General Science	Library Research	Home Ec. Lab.	Vocational Ag. 9-12
3:00		Science Lab			
	Indep. Study	Indep. Study	Indep. Study	Indep. Study	Indep. Study
4:00					

APPENDIX B

The schedule used in 1964-1965 is built on a fifteen minute module of time.

PAHRANAGAT VALLEY HIGH SCHOOL SCHEDULE 1964-1965

MONDAY

	ANDERSON	SULLIVAN	HANSEN	JOSLYN
9:00 9:15	Assembly			
9:30 9:45 10:00 10:15	Office	Government		French
10:30 10:45		Biology	Ag. 9	Home Ec. 9
11:00 11:15 11:30 11:45		Boys P.E.	English	Home Ec. 10-12
12:00 12:15 12:30	Lunch			
12:45 1:00 1:15 1:30 1:45	Algebra I Algebra II	Chemistry	English 10 English 9	Family Relations
2:00 2:15 2:30 2:45	Mech. Drawing		Ag. 10-12	Girls P.E.
3:00 3:15 3:30 3:45 4:00	Math	General Science	English 11-12	Home Ec. 7-8

TUESDAY

	ANDERSON	SULLIVAN	HANSEN	JOSLYN
9:00 9:15 9:30	Music, Speech, Plays, Debate			
9:45 10:00 10:15	Algebra I Math	Government	English 10	Study
10:30 10:45 11:00	Algebra II	Study	English 9	Type
11:15 11:30 11:45	Office Study		Ag. 11-12	Home Ec. 10-12
12:00 12:15 12:30	Lunch			
12:45 1:00 1:15	Math	General Science	English 11-12	Study
1:30 1:45 2:00	Drivers Ed.	Chemistry	English Study	French
2:15 2:30 2:45	Office	Biology	Ag. 9	Home Ec. 9
3:00 3:15 3:30		Boys P.E.	Study	Study
3:45 4:00				

WEDNESDAY

	ANDERSON	SULLIVAN	HANSEN	JOSLYN
9:00	Vocabulary			
9:15				
9:30				
9:45				
10:00	Office	Biology	English 9	Family Rel.
10:15				
10:30				
10:45		Boys P.E.		
11:00			English 8	Home Ec. 11-12
11:15				
11:30				
11:45	Lunch			
12:00				
12:15				
12:30				
12:45	Math	Government		French
1:00				
1:15				
1:30	Algebra II Math	General Science		
1:45				
2:00				
2:15	Mech. Drawing	Chemistry	Ag. 10-12	Girls P.E.
2:30				
2:45				
3:00				
3:15	Algebra I		English Study	Home Ec. 7-8
3:30				
3:45				
4:00				

THURSDAY

	ANDERSON	SULLIVAN	HANSEN	JOSLYN
9:00	Speech, Plays, Debate			
9:15				
9:30				
9:45				
10:00	Algebra I Math	Government	English 10	
10:15				
10:30				
10:45	Algebra II Math	English	English 9	Type
11:00				
11:15				
11:30	Math	General Science		P.E. 5-6
11:45				
12:00	Lunch			
12:15				
12:30				
12:45	Office	Biology	Ag. 9	Home Ec. 9
1:00				
1:15				
1:30				
1:45				
2:00		Chemistry	Ag. 10-12	Girls P.E.
2:15				
2:30				
2:45				
3:00		Boys P.E.		Home Ec. 11-12
3:15				
3:30				
3:45				
4:00				

FRIDAY

	ANDERSON	SULLIVAN	HANSEN	JOSLYN
9:00 9:15 9:30 9:45	Drivers Ed.		English 11-12	French
10:00 10:15		Government		
10:30 10:45	Office		Ag. 9	Type
11:00 11:15 11:30 11:45		Boys P.E.		Home Ec. 11-12
12:00 12:15 12:30	Lunch			
12:45 1:00 1:15	Office	Biology	English 9	Family Rel.
1:30 1:45 2:00 2:15	Algebra II	General Science	English Study	
2:30 2:45 3:00			F.F.A.	F.H.A.
3:15 3:30 3:45 4:00	Algebra I	Chemistry	English 10	Home Ec. 7-8

APPENDIX C

The five forms included in this appendix have proven satisfactory in the construction and implementation of a daily modular schedule.

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

1965-1966

TEACHER _____ DATE _____

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

FORM 2

PAHRANAGAT VALLEY HIGH SCHOOL DAILY SCHEDULE

DATE _____

	ANDERSON	SULLIVAN	JOSLYN	HANSEN
9:00				
9:15				
9:30				
9:45				
10:00				
10:15				
10:30				
10:45				
11:00				
11:15				
11:30				
11:45				
12:00				
12:15				
12:30				
12:45	LUNCH			
1:00				
1:15				
1:30				
1:45				
2:00				
2:15				
2:30				
2:45				
3:00				
3:15				
3:30				
3:45				
4:00				

FORM 3

SPECIAL ANNOUNCEMENTS

STUDENTS REQUESTED TO MAKE APPOINTMENTS .

NAME	SUBJECT	TIME REQUIRED

ANNOUNCEMENTS

STUDENT ACTIVITIES

FORM 4 _____ STUDENTS SCHEDULE DATE _____

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00					
9:15					
9:30					
9:45					
10:00					
10:15					
10:30					
10:45					
11:00					
11:15					
11:30					
11:45					
12:00					
12:15					
12:30					
12:45					
1:00					
1:15					
1:30					
1:45					
2:00					
2:15					
2:30					
2:45					
3:00					
3:15					
3:30					
3:45					
4:00					

FORM 5

PAHRANAGAT VALLEY HIGH SCHOOL ALAMO, NEVADA

	NAME	SUBJECT	TOPIC
9:00			
9:15			
9:30			
9:45			
10:00			
10:15			
10:30			
10:45			
11:00			
11:15			
11:45			
12:00			
12:15			
12:30			
12:45			
1:00			
1:15			
1:30			
1:45			
2:00			
2:15			
2:30			
2:45			
3:00			
3:15			
3:30			
3:45			
4:00			

APPENDIX D

DAILY MODULAR SCHEDULES USED AT

PAHRANAGAT VALLEY HIGH SCHOOL

Appendix D includes the actual schedules used at Pahranagat Valley High School, December 6, 1965, to December 10, 1965. The December 6 schedule is followed by the teachers daily requests for that day. These daily provide information necessary to construct the master schedule for that day. December 7 through 10 are followed by the teachers daily request used in their construction.

Examples of student schedules that coincide with these same five days are included in Appendix E.

PAHRANAGAT VALLEY HIGH SCHOOL DAILY SCHEDULE DATE 12/6/65

	ANDERSON	SULLIVAN	JOSLYN	HANSEN
9:00	Office	World History	French I Addresses-Quiz	English 11-12
9:15				
9:30				
9:45	Algebra I			
10:00		Study	Type II Tabulations	Plant Science
10:15				
10:30	Math Study	General Science Test	French La date-quiz	Study
10:45				
11:00		American Hist. Test	Study	Ag. 9
11:15				
11:30		Boys P.E.	Home Ec. 9 Clothing Const.	
11:45				
12:00				
12:15			Home Ec. 11-12	
12:30				
12:45				
1:00				
1:15	Geometry Lecture	Chemistry	Family Relations Engagements	English Study
1:30				
1:45	Geometry Study		Type I Block-style	
2:00				
2:15			Home Ec. 7-8 Cooking Milk Desserts	English 9
2:30				
2:45				English 10
3:00				
3:15	Shop	Band	Band	Band
3:30				
3:45				
4:00				

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Joslyn

DATE 12/6/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
French 1				30	
French 2				30	
Type 1				30	
Type 2				30	
Family Rel.				30	
Home Ec. 7-8				2:15 - 3:15	
Home Ec. 9				45	
Home Ec. 10-12				30	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Sullivan

DATE 12/6/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Chemistry				2½ Hrs.	
General Science	Test			30	
World History				45	
Amer. History	Review Test			45	
P.E.				1 Hr	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Anderson

DATE 12/6/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Geometry		Lecture		30	
Geometry		Study		30	
Algebra I		Study		45	
General Math		Study		?	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Hansen

DATE 12/6/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
English 9				30	
English 10				30	
English 11-12				30	
Ag. 9				45	
Plant Science				45	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

PAHRANAGAT VALLEY HIGH SCHOOL DAILY SCHEDULE DATE 12/7/65

	ANDERSON	SULLIVAN	JOSLYN	HANSEN
9:00				
9:15		World History Test Unit 4		English 11-12 Ben Franklin
9:30	Algebra I			
9:45				
10:00		American Govt. American Literature	Advanced Home Ec. Play - School	English 10 Kenningstone
10:15				
10:30				English 9 Kitty Hawk
10:45	Math Study			
11:00		General Science Sound		Structures Record Book
11:15				
11:30				
11:45		Boys P.E.		
12:00				
12:15				
12:30				
12:45	NOON			
1:00				
1:15				
1:30	Geometry Study	Study	French II	Independent English
1:45			French I	
2:00	Geometry Lecture Sec. 5-6			
2:15				
2:30				
2:45	Shop Decide on project	Chemistry Chemical Equation	P.E. 7-12	Ag. 9 Record Book
3:00				
3:15				
3:30			P.E. 5-6	Study
3:45				
4:00				

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Anderson

DATE 12/7/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Algebra I				75 Min.	
General Math	Study			75 Min.	
Geometry	Study			30 Min.	
Geometry	Sec. 5-6	Lecture		30 Min.	
Shop	Decide Proj.			60 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

DATE 12/7/65

TEACHER Joslyn

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Advanced Home Ec.	Play School			10:00 - 12:00	
French I				45 Min.	
French II				30 Min.	
P.E. 7 - 12				2:15 - 3:15	
P.E. 5 - 6				3:15 - 4:00	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Hansen DATE 12/7/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
English 9	Kitty Hawk	Lit.		30 Min.	
English 10	Kenningstone	Lit.		30 Min.	
English 11-12	Ben Franklin	Lit.		30 Min.	
Ag. 9	Record Book			45 Min.	
Structures	Record Book			45 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Sullivan

DATE 12/7/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Boys P.E.	Basketball			60 Min.	X
Chemistry	Chemical Equation			60 Min.	X
General Science	Sound			45 Min.	X
American Govt.	American Literature			45 Min.	X
World History	Test Unit 4			30 Min.	X

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

PAHRANAGAT VALLEY HIGH SCHOOL DAILY SCHEDULE DATE 12/8/65

	ANDERSON	SULLIVAN	JOSLYN	HANSEN
9:00	Geometry Review	Independent study	French I	Independent English
9:15				
9:30			Type I	
9:45				
10:00	General Math Programed		French II	English 9 "Across the sea of stars"
10:15				
10:30			Type II	
10:45				
11:00		General Science Sound	Family Relations	Plant Science
11:15				
11:30				
11:45	Office	Boys P.E.	Home Ec. 10-12	
12:00				
12:15			FHA Meeting	
12:30				
12:45	NOON			
1:00				
1:15				
1:30	Study	Chemistry Chemical Formulas	Home Ec. 9	Ag. 9 Prod. Records
1:45				
2:00				
2:15				
2:30	Algebra I	World History Age of Discovery	Home Ec. 7-8	English 11-12 Test
2:45				
3:00		American History Test Chapter 13		English 10
3:15				
3:30	Shop	Band		Independent Study
3:45				
4:00				

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

DATE 12/8/65

TEACHER Hansen

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
English 9	"Across the sea of stars"			30 Min.	
English 10				30 Min.	
English 11-12	Test			30 Min.	
Ag. 9	Production Records			45 Min.	
Plant Science				45 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Joslyn DATE 12/8/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Adv. Home Ec.	Film and Discussion			30 Min.	
Home Ec. 9				45 Min.	
French I				30 Min.	
French II				30 Min.	
Home Ec. 7-8				2:15 to 3:15	
Type I				30 Min.	
Type II				30 Min.	
Family Relations				30 Min.	
FHA Meeting				30 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

1965-1966

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Sullivan

DATE 12/8/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
P.E.	Basketball			60 Min.	X
General Science	Sound			45 Min.	X
Chemistry	Chemical Formulas			60 Min.	X
World History	Age of Discovery			30 Min.	X
American History	Test Chap. 13			30 Min.	X

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES
Chemistry Students -- complete Exp. 11	Emperical Formulas of a Compound.	
American Government -- complete Tests through Chapter 14		

Form 1

1965-1966

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Anderson

DATE 12/8/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Algebra I		Lecture		60 Min.	
Geometry	Review	Discussion		60 Min.	
Shop	Project	Lab.		60 Min.	
General Math	Programed	Study			Student Schedule 30 Min.

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

DATE 12/9/65

	ANDERSON	SULLIVAN	JOSLYN	HANSEN
9:00	Geometry Test Chap. 5	General Scie. Sound		English Study
9:15				
9:30				
9:45	Geometry Study		French I Addresses	Plant Science
10:00				
10:15		World History New Dis.		English 11-12
10:30	Algebra I Lecture			
10:45				
11:00		Chemistry Balancing Formula	Home Ec. 10-12 Play School	Ag. 9
11:15	Office			
11:30				
12:00		Boys P.E. Basketball		
12:15				
12:30				
12:45				
1:00				
1:15				
1:30				
1:45				
2:00	Math Study Programed	American History Test		English 10
2:15				
2:30			Girls P.E. Basketball	
2:45				Structures
3:00				
3:15				
3:30	Shop Projects	Band	P.E. 5-6 Kick Ball	English Study
3:45				
4:00				

1965-1966

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Hansen

DATE 12/9/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
English 10				30 Min.	
English 11-12	Declaration of Independence			45 Min.	
English 9				30 Min.	
Ag. 9				45 Min.	
Structures				45 Min.	
Plant Science				30 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

1965-1966

TEACHER Anderson

DATE 12/9/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Geometry	Chapter 5	Test		30	
Geometry	Review Test			30	
Algebra I	Discussion	Lecture		45	
Shop	Projects	Lab.		60	
Math	Programed	Study		30	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES
Evan	Math	30 Minutes
Deanna Davis	Geometry	15 Minutes

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Sullivan

DATE 12/9/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
P.E.	Basketball			60	
Science	Sound			30	
Chemistry	Balancing Formula			60	
World History	New Discoveries			30	
American History	Test			30	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Joslyn

DATE 12/9/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Adv. Home Ec.				10:00-12:30	
French I				30	
French II				30	
P.E. 7-12				2:15- 3:15	
P.E. 5-6				3:15- 4:00	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

PAHRANAGAT VALLEY HIGH SCHOOL DAILY SCHEDULE DATE 12/10/65

	ANDERSON	SULLIVAN	JOSLYN	HANSEN
9:00	Ex. Council			
9:15		World History	French I	
9:30	Geometry	Age of Exploration	Address Quiz	
9:45	Check test			
10:00	Introduction 6-1		Type II	Individual
10:15	p. 192 5-14		Tabulation	English
10:30				
10:45	Algebra I	Chemistry	Study	
11:00		Types of Chemical		English 10
11:15		Reaction		Insert Flap A
11:30				
11:45	Math Study	General Science	Family Relations	Plant Science
12:00	Schedule 30 Min.	Sound	Engagements	
12:15			French II	
12:30			La date--quiz	English 9
12:45		NOON		
1:00				
1:15				
1:30	Office		Advanced Home Ec.	FFA
			Child develop. 5	
1:45			yr. soc. develop.	
2:00		American History	Home Ec. 9	Ag. 9
2:15		Unit 4	Clothing	
2:30		Introduction	Construction	
2:45	Student Council		zipper	
3:00		Study	Type I Block	English 11-12
3:15			Style Letters	Portrait of Wash.
3:30				
3:45		Assembly	Show	
4:00				

Form 1

1965-1966

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Marilyn Bingham (Student President)

DATE 12/10/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Ex. Council	Weekly Meeting			15 Min.	
Student Council	Meeting			15 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

1965-1966

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Anderson DATE 12/10/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Algebra I		Discussion		60 Min.	
Geometry	Check Test				
Geometry	Intro. 6-1	Tape		60 Min.	Assignment p 192 5-14
Math	Programed	Study			

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES
Bradley Mann	Geometry Chapter test	15 Min.
Steven Anderson	Geometry Chapter test	15 Min.

Form 1

1965-1966

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

DATE 12/10/65

TEACHER Sullivan

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Chemistry	Types of Chem. Rec.			60 Min.	X
General Science	Sound			45 Min.	X
American History	Unit 4 Introduction			45 Min.	X
World History	Age of Exploration			45 Min.	X

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES
The bus will leave 5:15 Friday for the game at Virgin Valley.		All members of the team will go on the bus.
After the game, all students who go on the bus will return the same way.		

1965-1966

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Joslyn

DATE 12/10/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
Adv. Home Ec.	Child Development			30 Min.	
Home Ec. 9	Clothing Construction			60 Min.	
French I	Addresses-quiz			30 Min.	
French II	La date-quiz			30 Min.	
Type I	Block style letters			30 Min.	
Type II	Tabulation			30 Min.	
Family Relations	Engagements			30 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

Form 1

PAHRANAGAT VALLEY HIGH SCHOOL
TEACHERS DAILY REQUEST

TEACHER Hansen DATE 12/10/65

SUBJECT	TOPIC	METHOD	LECTURE #	MODULE OF TIME	STUDENT REQUEST TO ATTEND
English 10	Insert flap A			30 Min.	
English 11-12	Portrait of Washington			30 Min.	
English 9	Chuting for fun			30 Min.	
Ag. 9				45 Min.	
Plant Science				45 Min.	
FFA				30 Min.	

STUDENTS REQUESTED TO MAKE APPOINTMENTS

NAME	SUBJECT	LENGTH OF TIME IN MINUTES

APPENDIX E

Within this Appendix are examples of five students schedules for the week of December 6, 1965, to December 10, 1965. These schedules can be made to coincide with the schedules found in Appendix D.

NAME Maureen Nelson STUDENTS SCHEDULE DATE December 6-10

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00			French I	General Science	French I
9:15					
9:30	Absent	Algebra I			
9:45			Type I	French I	General Science
10:00			English 9		
10:15	Algebra I			Algebra I	
10:30	General Science		English		Algebra I
10:45		English 9			
11:00					
11:15	English	General Science	General Science	English Test	
11:30					General Science
11:45	Home Ec.	English Study	English Study	General Science	
12:00					
12:15	Home Ec. Study		FHA	Read	English 9
12:30					
12:45					
1:00					
1:15					
1:30	English	French	Home Ec.	English 9	Read
1:45					
2:00	Type I	French I	Break	French	
2:15					Home Ec.
2:30	English 9	Girls P.E. 7-12	Algebra I	Girls P.E. 7-12	
2:45					
3:00	English				Type I
3:15					
3:30	Band	Band	Band	Band	Band
3:45					
4:00					

NAME Letitia Nesbitt STUDENTS SCHEDULE DATE December 6

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00	English 11-12	English 11-12	American Govt.	English	
9:15					
9:30					
9:45		English	Read		
10:00	Shorthand	Play School		English 11-12	
10:15					
10:30			Family Relations		
10:45					
11:00	Office Practice		Family Relations	Play School 10-12	
11:15					
11:30			Home Ec. 10-12		
11:45					
12:00	Home Ec.	Office Practice	F.H.A.		
12:15					
12:30					
12:45					
1:00					
1:15					
1:30	Family Relations	Family Relations	Read	American Govt. T.	
1:45				American Govt.	
2:00	Book-Keeping				
2:15		P.E.	English	P.E.	
2:30					
2:45	Home Ec.		Drivers Test		
3:00		English		Shorthand	
3:15					
3:30					
3:45					
4:00					

NAME Mark Wright STUDENTS SCHEDULE DATE December 6-10

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00					
9:15	French I		French I	Gen. Sci.	French
9:30					
9:45	Algebra I	Algebra	Type I	French I	
10:00					
10:15			English 9		
10:30	Gen. Sci.	English 9			
10:45					
11:00	Ag. 9	Gen. Sci.	Gen. Sci	Ag. 9	
11:15					
11:30					General Science
11:45	P.E.	P.E.	P.E.	P.E.	
12:00					English 9
12:15					
12:30					
12:45					
1:00					
1;15					
1:30			Ag. 9	English 9	F.F.A.
1:45					
2:00	Type	French I			Ag. 9
2:15					
2:30	English 9				
2:45		Ag. 9	Algebra		
3:00					
3:15					
3:30	Band	Band	Band	Band	Show
3:45					
4:00					

NAME Sherida Shumway STUDENTS SCHEDULE DATE December 6

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00					
9:15				Read	Pep Club Outfits
9:30	English				
9:45			American History	English	
10:00					Type II
10:15					
10:30	American History				
10:45			Type II		English
11:00					
11:15	American History	Absent		Play School	
11:30			Type		
11:45					Bookkeeping
12:00	English		Home Ec.		
12:15					
12:30	Home Ec.		F.H.A.	English	
12:45					
1:00					
1:15					
1:30	English		Bookkeeping	History	Home Ec.
1:45				American History	
2:00					American History
2:15			English		
2:30					
2:45	Bookkeeping		American History	P.E.	Read
3:00					
3:15					English
3:30					
3:45	Read		Read	March	Show
4:00					

NAME Mike STUDENTS SCHEDULE DATE December 6

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00					
9:15	World History	World History	Type	Read	World History
9:30		Read			
9:45		English 10	Type I	English	
10:00	English			World History	
10:15			English		
10:30		English		Math	
10:45	Book Report				
11:00		Structures	World History+	World History	English 10
11:15					
11:30					Math
11:45					
12:00					
12:15	P.E.	P.E.	P.E.	P.E.	English
12:30					
12:45					
1:00					
1:15					
1:30	English	Type		English	F.F.A.
1:45					
2:00	Type	World History		English 10	
2:15			World History		
2:30	World History				
2:45		English	English	Structures	Type I
3:00	English 10				
3:15					
3:30	World History				
3:45		Shop	Shop	Shop	Shop
4:00					